

**REMARKS**

The Final Office Action mailed July 21, 2003 (Paper No. 8) has been carefully reviewed and the following is made in response thereto. Applicants respectfully request reconsideration of this application and the timely allowance of the pending claims.

***Applicant Initiated Interview Request***

Applicants submit with this filing a formal request for an interview with the Examiner and her Supervisory Primary Examiner (S.P.E.) prior to examination on the merits of this RCE application. The proposed date and time for the interview have been left blank on the attached Applicant Initiated Interview Request Form (PTOL-413A). The Examiner is invited to contact the undersigned at her convenience to finalize arrangements setting a date and time when the interview can take place. In addition to Applicants' representatives, one of the inventors, Dr. Kurt Dahlberg, will be in attendance. Applicants note that requests for interviews prior to first Office Actions are ordinarily granted in continuing or substitute applications (M.P.E.P. at 713.02).

***Information Disclosure Statement***

Applicants acknowledge receipt of a signed, initialed and dated copy of the PTO form 1449 filed on July 2, 2002 in this application.

Applicants note that the PTO form 1449 included with the Information Disclosure Statement filed on January 29, 2003 has not been returned to Applicants by the Office. Included herewith is a courtesy copy of this IDS and PTO form 1449 along with a copy of the date-stamped post card acknowledging receipt of the same by the Office. The Examiner is respectfully requested to consider the listed references and indicate the same by returning a signed, initialed and dated copy of the Form with the next Office Action.

Applicants submit with the instant RCE request a Supplemental Information Disclosure Statement with three references. The Examiner is respectfully requested to consider the listed references.

***Status of the Claims***

Claims 1-16 and 18-36 are pending.

***The Rejection under 35 U.S.C. § 102(b)***

Claims 1-7 and 36 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by Romaine *et al.* (U.S. Pat. No. 4,803,800). Applicants respectfully traverse the rejection and request reconsideration for the following reasons.

It is axiomatic in U.S. patent law that a claim is anticipated only if each and every element set forth in the claim is found, either expressly or inherently, in a single prior art reference. See *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

The Office Action mailed July 21, 2003 maintains the allegation that the claims are anticipated or rendered obvious over Romaine *et al.* It is respectfully reiterated that nothing in Romaine *et al.* teaches, either expressly or inherently, the claimed invention. Neither does Romaine *et al.* even remotely suggest what is being claimed. This is because Romaine *et al.* is directed to materials that are completely different from the claimed Enriched Mushroom Compost Supplement and a person having skill in the art would not equate or substitute the claimed materials for those disclosed in Romaine *et al.*

The Office Action repeatedly refers to the Romaine *et al.* material as an “enriched mushroom compost supplement.” Respectfully, at no time do Romaine *et al.* describe anything in the reference as an “enriched mushroom compost supplement” and nothing in Romaine *et al.* discloses an Enriched Mushroom Compost Supplement, either by name or by implication. Rather, the Romaine *et al.* material is characterized as “a synthetic analog of prior known grain substrate for spawn or compost substrate for CACing material.” See Romaine *et al.* at column 12, lines 27-31. Applicants reiterate that Romaine’s “Synthetic CACing Agent” is equivalent to Mushroom Casing Spawn which is described in U.S. Patent No. 5,503,647. Mushroom Casing Spawn is not the same as an Enriched Mushroom Compost Supplement or Mushroom Spawn.

The Office Action alleges that Romaine *et al.* at column 9, lines 31-45 and column 10, lines 59-68 “disclose an enriched mushroom compost supplement comprising the addition of a polysaccharide to a mushroom compost supplement.” Respectfully, this is not what the Romaine

*et al.* reference teaches or suggests. The passage at column 9, lines 31-45 in Romaine *et al.* is directed to a “nutrient reserve contained within the gel matrix” of the Romaine *et al.* material. As stated previously, the gel matrix material of Romaine *et al.* is a Mushroom Casing Spawn. Applicants reiterate that Mushroom Casing Spawn is radically different from Enriched Mushroom Compost Supplement. The Office Action alleges that “the gel matrix of Romaine *et al.* contains the same ingredients or materials as that of Applicants [sic] invention, therefore, it is capable of being used or performed [sic] the same function for the same purpose and reasons intended by Applicants.” Office Action at page 6. Applicants respectfully disagree.

The gel matrix of Romaine *et al.* is the functional equivalent of Mushroom Spawn and Mushroom Casing Spawn. Mushroom Spawn and Mushroom Casing Spawn are materials that are formulated to include the mycelium of the mushroom fungus, and are used to inoculate the mushroom fungus into the mushroom substrate or casing layer. Mushroom Spawn and Mushroom Casing Spawn are the mushroom equivalent of seed. In marked contrast, the Enriched Mushroom Compost Supplement of the present invention does not contain mushroom mycelium because spawn (containing mushroom mycelium) is added separately to the Compost or to the casing layer. Mushroom mycelium is not an ingredient of Enriched Mushroom Compost Supplement. The statement equating Enriched Mushroom Compost Supplement and Mushroom Casing Spawn based on their ingredients mischaracterizes the radical difference between these two distinct materials.

The Office Action also refers to column 10, lines 59-68 of Romaine *et al.* as allegedly teaching an Enriched Mushroom Compost Supplement. Applicants respectfully disagree. The cited portion of Romaine *et al.* is a discussion of the use of the inoculated substrate (*i.e.*, the gel matrix) as a spawn. As such, it is a replacement for grain spawn added to mushroom compost. It is not a description of an Enriched Mushroom Compost Supplement.

The differences between Mushroom Compost Supplement, Mushroom Spawn, and Mushroom Casing Spawn are fundamental. These distinctions are very well known to those with even a rudimentary understanding of mushroom cultivation. Applicants attach herewith, and include on the accompanying Information Disclosure Statement, product descriptions for Mushroom Compost Supplements (Nutritional Supplements), Mushroom Spawn and Mushroom Casing Spawn (Casing Inoculum) sold by Sylvan Spawn Company, one of the largest producers

and distributors of mushroom growing products. Respectfully, Mushroom Compost Supplement, Mushroom Spawn and Mushroom Casing Spawn are different classes of materials composed of different ingredients which are used for different reasons by those having skill in the art of mushroom cultivation. Such a person would not confuse these products or attempt to use one in place of the other because they are designed for different purposes in the process of commercial mushroom production.

A careful reading of Romaine *et al.* clearly demonstrates that the materials therein are distinctly different materials. For instance, Example 10 in Romaine *et al.* describes the following mushroom growing conditions:

“For each treatment, a two ft<sup>2</sup> tray containing 50 pounds of compost (supplemented at spawning with 2 pounds of Spawn Mate II, a commercially available delayed release nutrient supplement obtained from Spawn Mate, Inc. San Jose, Calif.) was spawned with 110 grams of rye grain colonized with *A. bisporus* (Swayne’s Generation II strain).” See column 25, lines 30-36.

In the same example, Romaine *et al.* state that:

“After a 13 day spawn run at 25° C., ... one tray was cased with a mixture of 12 pounds peat and 114 grams of shredded *A. bisporus*-colonized compost ..., [and] one tray was cased with a mixture of 12 pounds peat and 124 grams of *A. bisporus*-colonized capsules ....” [*to wit*, the subject of the Romaine *et al.* patent]. See column 25, lines 61-68.

It is clear from this example that Romaine *et al.* add three distinct ingredients to the compost.

The first is a Mushroom Compost Supplement. Spawn Mate II is a commercially available supplement manufactured essentially as described in U.S. Patent No. 3,942,969. Note that U.S. Patent No. 3,942,969 is described in the instant application at page 4, paragraph 13.

The second ingredient is Mushroom Spawn. In this example, Romaine *et al.* use rye spawn. Grain based mushroom spawn was first disclosed in U.S. Patent No. 1,869,517. Note that Mushroom Spawn is not described in detail in the instant application because it is a material distinct from the claimed Enriched Mushroom Compost Supplement. Mushroom Spawn, as stated in the publication submitted herewith published by Sylvan Spawn Company is “the mushroom equivalent of seed.”

The third ingredient is “Synthetic CACing,” or the subject of the Romaine *et al.* disclosure. Romaine *et al.* define the term “CACing” at column 2, lines 38-41. Romaine *et al.* also define their material as a “Synthetic CACing agent” (Abstract and column 4, lines 24-26). Applicants reiterate that Romaine’s “Synthetic CACing Agent” is equivalent to Mushroom Casing Spawn but it is not equivalent to an Enriched Mushroom Compost Supplement. Mushroom Casing Spawn is described in U.S. Patent No. 5,503,647 which was incorporated by reference into the instant application at page 3, lines 1-2. In fact, the material in the Romaine *et al.* patent is described in the ‘647 patent at column 2, lines 11-13 as a casing spawn.

The use of three distinct materials (Mushroom Compost Supplement, Mushroom Spawn and Mushroom Casing Spawn) in Example 10 of Romaine *et al.* demonstrates that these are not the same materials and they are not interchangeable. In fact, they are separate and distinct products used for different purposes and composed of different ingredients. Romaine *et al.* would have had no reason to use ingredients in their mushroom cultivation procedure that were competitive and redundant with Mushroom Casing Spawn, which is the subject of their disclosure.

Finally, the Examiner’s attention is respectfully directed to the web site for Sylvan Spawn Company, a leading manufacturer of products for use in cultivating mushrooms <http://www.sylvaninc.com/Products/index.html>. The Sylvan web site clearly describes their three major products for growing mushrooms. These are Spawn, Casing Inoculum (*i.e.*, Mushroom Casing Spawn) and Nutritional Supplements (*i.e.*, Mushroom Compost Supplements). These products are clearly distinguished as different materials and are recognized as such by those having ordinary skill in the art of mushroom cultivation.

Applicants respectfully submit that the Romaine *et al.* reference is misapplied against the pending claims because it simply does not teach an Enriched Mushroom Compost Supplement. Withdrawal of the rejection is requested.

### ***The Rejection of Claims under 35 U.S.C. § 103(a)***

Claims 8-35 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Romaine *et al.* (U.S. Pat. No. 4,803,800). Applicants respectfully traverse the rejection and request reconsideration for the following reasons.

Applicants' comments above with respect to the Romaine *et al.* patent are incorporated herein by reference. Respectfully, nothing in Romaine *et al.* suggests the claimed Enriched Mushroom Compost Supplement because Romaine *et al.* is directed to an entirely different material. There would have been absolutely no motivation to modify the teachings in Romaine *et al.* to arrive at the claimed invention because a person skilled in the art of mushroom cultivation would not substitute a Mushroom Casing Spawn for an Enriched Mushroom Compost Supplement.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all of the claimed limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicants' disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See M.P.E.P. at 2143.

Respectfully, none of the requirements for a *prima facie* case have been met. There would have been no motivation to modify the Romaine *et al.* reference to make the claimed Enriched Mushroom Compost Supplement because Romaine *et al.* has nothing whatsoever to do with Enriched Mushroom Compost Supplements. There would have been no expectation of success because Enriched Mushroom Compost Supplements are not even remotely suggested in Romaine *et al.* Finally, Romaine *et al.* do not teach the claimed limitations because the reference is not directed to Enriched Mushroom Compost Supplements. Withdrawal of the rejection is requested.

***Conclusion***

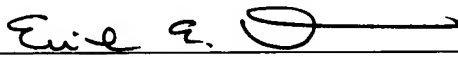
In view of the foregoing remarks, Applicants respectfully request withdrawal of all outstanding rejections and early notice of allowance to that effect. Should the Examiner believe that a telephonic interview would expedite prosecution and allowance of this application, she is encouraged to contact the undersigned at her convenience.

Except for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§ 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No.50-0310. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

**MORGAN, LEWIS & BOCKIUS LLP**

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